

REMARKS

The Office Action of February 25, 1999, has been carefully considered.

It is noted that the disclosure is objected to for containing various informalities.

Claims 1-10, 12-22 and 29 are rejected under 35 USC 112, second paragraph.

Claims 1-10, 12-22 and 29 are rejected under 35 USC 112, first paragraph.

Claims 1-10, 12-14, 19, 20, 22 and 29 are rejected under 35 USC 103(a) over European reference 099 264 of Doyle in view of the patent to Raschke, et al. and the patent to Calabrese, et al.

Claim 15 is rejected under 35 USC 103(a) over Doyle in view of Raschke, et al. and Calabrese, et al., and further in view of the patent to Back.

Claims 16 and 17 are rejected under 35 USC 103(a) over Doyle in view of Raschke, et al. and Calabrese, et al. and further in view of the patent to Chu, et al.

Claim 18 is rejected under 35 USC 103(a) over Doyle in view of Raschke, et al. and Calabrese, et al., and further in view of the patent to Peterson.

Claim 21 is rejected under 35 USC 103(a) over Doyle in view of Raschke, et al. and Calabrese, et al. and further in view of the patent to Tomanek.

In connection with the Examiner's rejection to the disclosure applicants have corrected the continuing data at the beginning of the application. With these changes it is respectfully submitted that the objection to the disclosure is overcome and should be withdrawn.

It is respectfully submitted that the claims now on file particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have amended claim 1 so that it contains a step of applying liquid toner particles. Concerning lines 8-9

of claim 1, applicants respectfully direct the Examiner's attention to the paragraph beginning on line 7 of page 10 of the specification of the present application. Here it is believed clearly indicated that it is not the removal of the non-fixed toner particles which changes the ink acceptance behavior of the layer, but instead the breaking down of the non-fixed liquid toner particles which changes the ink acceptance behavior of the layer. As presently written claim 1 states that the non-fixed liquid toner particles can be broken down to change the ink acceptance behavior of the layer, or the non-fixed toner particles can be removed, which in theory also alters the acceptance behavior of the layer in the regions where the toner particles are removed since the layer is no longer present in these regions.

In view of these considerations it is respectfully submitted that the rejection of claims 1-10, 12-22 and 29 under 35 USC 112, second paragraph, is overcome and should be withdrawn.

Concerning the rejection of claims 1-10, 12-22 and 29 under 35 USC 112, first paragraph, applicants believe that the discussion given above concerning claim 1 about the ink acceptance behavior of the layer addresses the concerns raised by the Examiner.

Concerning claim 29, applicants refer the Examiner to the paragraph beginning on line 3 of page 8 of the specification. In the embodiment described here it is clearly stated that the non-picture regions are the regions in which the layer 4 has not been removed. In other words, the non-picture regions are the regions where the toner is fixed. Those skilled in the art would readily understand that just the opposite can also occur, namely the fixed toner regions can be the picture regions. See, for example, page 12, lines 12-16 of the specification where it is stated that "the layer 4 formed by the particles 2 is fixed in accordance with the image by a beam 3,or

No

ablated in accordance with the image. Thereupon the unfixed portions of the layer 4 are removed or the non-ablated portions are fixed by full-surface heat treatment.”

In view of these considerations it is respectfully submitted that the rejection of claims 1-10, 12-22 and 29 under 35 USC 112, second paragraph, is overcome and should be withdrawn.

Turning now to the references, and particularly the European application of Doyle, it is seen that this reference teaches improvements relating to printing plates in which a plate is prepared by uniformly coating a substrate with a powder material. Doyle does not discuss in any way a printing plate in which liquid toner particles are utilized to create the printing form. Furthermore, Doyle provides no teaching concerning the changing of the powder layer thickness. In Doyle the electrostatic charging is changed by either voltage or time, not by changing the thickness of the layer. Furthermore, Doyle does not provide any teaching concerning erasing the printing form as a whole by removing the fixed liquid toner particles, as in the presently claimed invention.

The patent to Raschke, et al. discloses a reusable printing master and method of making same. As with Doyle, Raschke, et al. only deal with applying a powder to the print substrate. Although Raschke, et al. teach washing of the printing form, they do not provide teachings for the overall method having the specific steps recited in the claims presently on file.

The patent to Calabrese, et al. discloses a method for making lithographic printing plates utilizing a liquid toner. Calabrese, et al., however, do not electrically charge the printing form over its entire surface so that the liquid toner particles can be attracted to the entire surface of the printing form, as in the presently claimed invention. Instead, Calabrese, et al. specifically state that the electrostatic charge is selectively applied to the surface of the aluminum plate in a

predetermined pattern corresponding to the image to be printed. Furthermore, Calabrese, et al. do not teach fixing the liquid toner particles with a source of energy in accordance with a picture to be printed. Additionally, Calabrese, et al. do not teach or discuss removing the non-fixed liquid toner particles or breaking down the non-fixed liquid toner particles to change the ink acceptance behavior of the layer. Still further Calabrese, et al. do not teach controlling the thickness of the layer of liquid toner particles, as in the presently claimed invention.

The Examiner combined these references that claims 1-10, 12-14, 19, 20, 22 and 29 would be unpatentable over such a combination. First of all it is respectfully submitted that both Doyle and Raschke, et al. only deal with methods involving the use of powder. There is absolutely nothing in the teachings of either of these references which provides any indication that it will be possible to carry out their processes if liquid toner particles were utilized. Furthermore, there is absolutely no teaching to be found in Calabrese, et al. which would indicate any desirability for substituting the liquid toner particles of Calabrese, et al. for the powder of Doyle and Raschke, et al. Calabrese, et al. only teach the use of liquid toner particles when a portion of the surface of the printing plate has been electrostatically charged. Thus, there is no suggestion by any of the references that it would be possible or desirable to utilize liquid toner particles where the entire surface of the printing form has been electrically charged, as in the presently claimed invention. Furthermore, none of the references taken either alone or in combination provide any suggestion for controlling the thickness of the layer of liquid toner particles, nor is there any teaching of fixing the liquid toner particles with the source of energy in accordance with the picture to be printed. Still further there is no teaching concerning the removing or breaking down of non-fixed liquid toner particles as in the presently claimed invention. Thus, it is respectfully submitted that the only suggestion for combining these references can be made by

hindsight reconstruction of the presently claimed invention. However, even if these references are combined they do not teach or suggest a number of the steps of the claimed method as mentioned above.

In view of these considerations it is respectfully submitted that the rejection of claims 1-10, 12-14, 19, 20, 22 and 29 under 35 USC 103(a) over a combination of the above-discussed references is overcome and should be withdrawn.

As for the remaining references which were cited in combination with the previously discussed references against various of the independent claims, these have also been considered. Since they do not come close to the currently claimed subject matter than the references discussed above it is believed that any detailed comments thereon at this time would be superfluous.

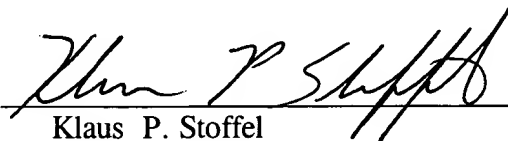
Thus, it is respectfully submitted that the rejections of claims 15-18 and 21 under 35 USC 103(a) are also overcome and should be withdrawn.

Reconsideration and allowance of the present application are respectfully requested.

It is believed that no fees or charges are required at this time in connection with the present application ; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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